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Huberts, Leo W.J.C.; van Rijswoud, Erwin

2019

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Huberts, L. W. J. C., & van Rijswoud, E. (2019). *Academic integrity in the social sciences: Research report on a survey on integrity at three faculties of the Vrije Universiteit Amsterdam*. Faculty of Social Sciences Vrije Universiteit.

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ACADEMIC INTEGRITY IN THE SOCIAL SCIENCES

**Research report on a survey on integrity at three faculties of
the Vrije Universiteit Amsterdam**

Leo Huberts & Erwin van Rijswoud

Published 2019 (original 2018)

Leo Huberts & Erwin van Rijswoud

Institute for Societal Resilience

Faculty of Social Sciences

Vrije Universiteit Amsterdam

De Boelelaan 1081

1081 HV Amsterdam

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Preface and acknowledgements

In the last years, integrity in academia has received considerable attention. Not just because debates over potential integrity violations frequented the academic and public media, but also because efforts have been made to develop new policies, practices and paradigms for ensuring academic and scientific integrity. This development also led to involvement of the Faculty of Social Sciences (FSS) of the Vrije Universiteit on the topic with a project on integrity which included a survey on the views, ideas, values and experiences concerning integrity among its employees. Two other faculties were willing to participate in the integrity survey (Faculties of Law and of Economics and Business Administration).

The survey was developed, and consequently distributed in April 2016. Previous draft reports were presented and discussed with groups of faculty researchers, teachers and supporting staff and in the faculty board. This has led to interesting discussions, also about the interpretation of the findings which in the end led to the conclusion that the researchers should take the primary responsibility to compose the research report and present that to the faculties for further consideration for discussion and policy development.

That process took some time but as authors we are glad that we are now able to present the report of the basic results with the mentioned purpose. It will be available to all those who take an interest in integrity at the Vrije Universiteit, in particular of course the faculties who were willing to participate in it. More detailed analyses will follow in future publications.

The introduction will further clarify the starting points and premises that were leading in the development of the survey.

In this preface we want to acknowledge the crucial input and contribution of many colleagues involved in the topic in all phases of the project and the survey. The integrity project was the initiative of the Faculty of the Social Sciences (FSS) and its research Institute for Societal Resilience (ISR), with financial support by the Vrije Universiteit. That has resulted in many initiatives and discussions about the survey research (with the cooperation in that survey of the faculties of Law and Economics and Business Administration) as well as in a lot of important suggestions on the content of the survey and the interpretation. The survey was designed and conducted by researchers from the research group ‘Quality of Governance’ of the Department for Political Science and Public Administration. We of course also like to thank all respondents from the faculties in the survey for their contributions. Also many others were involved in the survey, too many to name them all, but we nevertheless want to acknowledge the involvement in all phases of René Bekkers (chair of the FSS Ethical Review Board), Gjalt de Graaf (professor on integrity in education), the Faculty’s research support staff and in particular in the reporting phase the indispensable help of research assistant Martijn Wessels.

The over-all involvement of the three faculties in the survey deserves compliments and admiration. Many organizations are reluctant to collect information from employees on integrity and integrity violations and it takes courage and self-confidence to do that.

This research report expresses the results from the survey, the responsibility for this research report rests with the authors alone.

1. Introduction

Nowadays, the academic community pays considerable attention to ‘integrity’. As in many other societal sectors, this also resulted from scandals and integrity violations that attracted a lot of public and media attention. In the Netherlands, the discovery of research fraud by for example Diederik Stapel (2011, social psychology Tilburg)¹ and Mart Bax (2012, anthropology VU)² are among the examples that stimulated discussion and resulted in efforts to develop new policies, practices and paradigms for ensuring academic integrity.³ Codes of conduct, data management policies, the ethical review of social scientific research and the sharing of research data are amongst those new policies.

The increasing interest and involvement concerning research integrity is clear, which also contributed to the initiative by the Faculty of Social Sciences (FSS) to start a project on the topic, including some research through a survey. This research could build on experiences within the faculty with research on integrity in other societal contexts and sectors, in particular on the integrity of governance.⁴ Insights from that research were used to develop a survey which is exceptional in a number of aspects.

It seems self-evident that a first step consisted of the clarification of the central concepts as well as the conceptual framework of the study. Clarity about central concepts as ‘integrity’ and ‘quality’ is crucial for the academic debate, research and policy development. ‘Integrity’ will be interpreted in terms of behavior in line with the relevant moral norms and values.

Second, there is the awareness that the topic is not only related to the ‘dark side’ of ethics, to misconduct and integrity violations, but integrity also refers to the ‘bright side of ethics’ (to the missions and moral values of academic professionals). Which values are important for academic professionals, is there awareness on morals, on values, on what is considered good (and wrong) behavior?

Another aspect concerns the question which ‘violations’ are distinguished and taken into consideration. A broad framework was used, with fraud and corruption but also for example conflicts of interest, favoritism, intimidation and discrimination and private time misconduct.

Fourth, there is the question what causes the ‘bad’ and what helps to protect the ‘good’. The literature on the causes of integrity violations is diverse, with factors that include characteristics of the individual but the focus is on organizational structure and culture, including leadership.

A fifth and another related aspect concerns ‘what helps to protect integrity?’. To summarize the answer on ‘what helps’ organizations: 1 Integrity should be on the agenda, at all levels (top-

¹ About the Stapel scandal: Drenth, 2015.

² Report by Baud, Legêne & Pels, 2013.

³ This involvement was not new though. The (Dutch) literature offers important previous examples of involvement on the topic, see for example Van Kolschooten (1993), Heilbron, van Bottenburg & Geesink (2000), Drenth (2003), Köbben (2003).

⁴ See for example Huberts (2014) on the integrity of governance, Huberts (2005) with an inaugural address relating integrity research to academia, de Graaf (2016) with his inaugural address on values in academia and projects and reports more in general on values (Van der Wal, 2008), leadership and ethics (Lasthuizen, 2008; Heres & Lasthuizen, 2012), integrity violations (Huberts, 2005; De Graaf & Strüwer, 2014) and on reporting violations (De Graaf, 2010).

bottom) and sectors; 2 The tone at the top is important, the role of leadership; 3 Balancing and combining integrity strategies: value based (culture, values, awareness) and compliance based (norms, rules and sanctions); 4 The ‘integrity organization/system’ in place (in HRM, reporting system) and 5 Reflection on the effectiveness of strategies and instruments.

These rather general insights and considerations have been discussed in developing the content of the survey at the university. Basic choices included attention also for the ‘bright side’ with questions on the values that are important for respondent and thus also on organizational culture. Second, the focus on ‘academic integrity’ rather than only on ‘scientific or research integrity’⁵ (also because integrity in education and in management and organization are intimately related to, if not inseparable from, research integrity). Questions about the cultural and organizational dimension or context were included (importance of context) as well as on everybody’s knowledge of existing policies and institutions and perceptions of their effectiveness.

The existing knowledge on ‘academic integrity’ is limited, which makes research on the views, ideas, values and experiences concerning integrity among the employees in academia worthwhile. Therefore a survey was organized on how respondents perceive and experience integrity at three participating faculties (FSS and Faculties of Law and Economics and Business Administration). The survey was developed, and consequently distributed in April 2016. This report presents the results of the survey (rather descriptive for now) to make the results available to all those who take an interest in academic integrity at the Vrije Universiteit. More detailed analyses will follow in future publications.

The report will first clarify more in detail the survey design and the response. Afterwards it will pay attention to the mentioned topics with the results on values in academia (§ 4), the organizational culture in relation to integrity (§ 5), experiences with integrity violations (§ 6), data management and publication practices (§ 7) and fostering integrity and preventing violations (§ 8). The results primarily present the entire gamma cluster as a unit of analysis, and will sometimes break down to faculty level when that seems to generate additional perspectives. Where possible this report will compare results from the Gamma cluster with survey results from other sectors.

⁵ This refers to an important discussion within theory and practice. See for example on academic integrity Bretag (2016) and Macfarlane, Zhang & Pun (2014) and on research integrity Steneck et al. (2015).

2. Survey design, confidentiality and limitations

2.1 Survey design

In designing the survey a balance was sought between existing surveys on the one hand, and the specific needs and purposes of this project on the other. Where possible items and scales from existing survey were used, providing the opportunity to compare integrity in this domain with other sectors, such as hospitals, municipalities and civil servants.

In addition, we designed the survey in such a way that the following conditions were met:

- the survey could be completed by all respondents, irrespective of role (researchers, lecturers, managers and support staff) and position (from secretary to Dean);
- the survey should cover organizational culture, violations, research aspects and educational aspects;
- the survey had to be bilingual;
- the survey had to fit the particular nature of the three participating faculties ;
- it had to have a balance between closed and open responses;
- participation should take about 20 minutes;
- respondents should have maximum freedom to participate and to express their opinion in an anonymous fashion.

Based on these requirements, the bilingual survey that was developed comprised blocks, of which some (e.g., research) were self-selective for respondents that felt fit to answer those questions. Blocks presented were: values in science; organizational culture; education (self-selection); experiences with integrity violations; publishing and data management (self-selection); personal details.

The only two compulsory items were to provide informed consent, and to indicate the home faculty. In order to let respondents decide which personal details (such as position, gender and age category) they wanted to share after filling out the survey, these items were presented at the end. Respondents could either indicate the answer, indicate that they did not want to share that information, or leave it blank. Although that causes difficulty in relating results to particular groups of employees or to have an identical size of the cohort, this was needed to ensure freedom, confidentiality and anonymity.

A concept survey was pretested with a representative sample from the three faculties, including native English speakers. That resulted in numerous modifications to the survey. Then the survey was distributed with an accompanying letter from the respective Dean, urging employees to participate. The survey was open for one month, and non-respondents received a reminder after ten days, and two days before closure a final reminder.

2.2 Confidentiality

A particular topic of interest in both the design and communication of the survey was confidentiality. Since the survey addressed integrity and potentially integrity violations at the participating faculties, the following steps were taken to ensure that respondents felt secure enough

to participate and that their interests would not be harmed when participating and reporting on violations. This was also made explicit in the communication:

- Participation in the survey was voluntary, and with the exception of reporting the respondent's faculty, none of the items were obligatory;
- Questions on respondent's details (department, function, age category etc.), were listed at the end, providing the respondents the opportunity to take their earlier answers into consideration when revealing this personal data;
- The end-of-survey letter provided the addresses of confidential counsellors;
- None of the members of the three Faculty Boards, including the board member of FSS that acted as principle investigator on the project, had access to the raw data;
- Filled in surveys were checked by Erwin van Rijswoud for sensitive data, or data that could be traced to individual respondents;
- The completed surveys were stored on a separate folder, only accessible by ~~the~~ researchers;
- Positive advice was obtained from the FSS Ethical Review Board.

Communication on the survey started about one month before it opened with an announcement in the newsletters of the three participating faculties. When the survey opened (11 April 2016), all respondents received an email from their respective Dean with a link to the survey. The email invited them to participate, and made it clear that the Dean or Faculty board was not executing the research. In tandem with the first email a new news item was distributed, announcing the survey had opened. For FSS specific, the research directors also put the survey to the attention of their departments by sending an email.

2.3 Limitations of the study

The study has a number of limitations, that should be taken into consideration when interpreting the results. In part, these limitations result from the safeguards that were taken to increase the response rate.

The first limitation relates to the focus of the study on the *perceptions* and experiences of employees. Although we used multiple existing scales and combined closed and open questions, the responses reflect the subjective views of the respondents. It could be that some respondents were discontent with specific aspects of the organization, and translated this in a negative response to items that were in fact unrelated to the issue of discontent. Also, respondents could have included aspects in their answers that were, in fact, not as we intended the questions into integrity.

The second limitation concerns the actual response (see for more detail the next paragraph). The response rate was not as high as we hoped for and expected, and the length and broadness of the survey may have contributed to that.

Thirdly, the choice to have a few compulsory items as possible resulted in variable response rates for the different items. In order to ensure confidentiality, we for example presented items on personal details last. Not all respondents answered those questions, and that has consequences for the analysis of the results. Therefore, we will often add the actual response rate in describing the results.

3. Participating faculties and respondents profile

The Gamma cluster (in the Vrije Universiteit) comprises three faculties: the Faculty of Law (henceforth abbreviated as Law), the Faculty of Economics and Business Administration (FEWEB), and the Faculty of Social Sciences (FSS). Unlike the situation at other universities, behavioral sciences (i.e. psychology) is not part of the gamma cluster. The project academic integrity and hence the survey was initiated and developed by researchers from FSS, and execution of the survey was attuned with the policy advisors at the other two faculties.

The three participating faculties differ in types of research being conducted (varying kinds of empirical and theoretical work), in types of relations with the outside world (e.g., staff from the faculty of Law that also is attorney or Judge and FEWEB staff also working in commercial consultancy), as well as in relation to the graduate's job market (the nearby business heart of the Zuidas attracts lawyers, business administrators and public administrators, as well as communication scientists).

Since we wanted to collect the views on and experiences with integrity in research, education and the organization, we included all employees of the faculties via the email list of the communication services. This means that we did not filter the list's entire population, thereby including student assistants, people with guest accounts and employees with small or potentially expired contracts in the survey population. Of course this generates an unreliability in determining the response rate, but the importance of being inclusive outweighs that drawback. Based on the list of employees the faculties (reference data 7 April 2016) the sizes job categories were inventoried (see table 1). The next paragraphs will clarify how this relates to the actual response.

Table 1. Description of staff of the three faculties, reference data 7 April 2016

	<i>Support staff⁶</i>	<i>Student-ass.</i>	<i>Guest</i>	<i>PhD</i>	<i>Researcher</i>	<i>Lecturer</i>	<i>Ass. Prof.</i>	<i>Assoc. prof</i>	<i>Prof.⁷</i>	<i>Total</i>
<i>Law</i>	41	25	6	71	32	69	49	15	60	368
<i>FSS</i>	60	25	33	166	42	46	44	43	51	510
<i>FEWEB</i>	88	13	15	193	108	153	99	69	106	844
<i>Total</i>	189	63	54	430	182	268	192	127	217	1722

3.1 Response Rate

In the month that the survey was open to participation, about one-third of the respondents opened the link. 367 employees continued with an answer on the first question (which faculty the respondent is part of), 305 filled in one or more questions afterwards (17.7%). The number of employees that answered the questions differed, also because we wanted have as few obligatory items as possible. As a consequence, a varying number of respondents answered the questions. Therefore, we will rather often report per question how many respondents answered the question.

In addition, we can make the following remarks on the response rate:

⁶ Department level and faculty level.

⁷ Full, extraordinary and emeritus

- We may have had ghost respondents in the emailing list, polluting the response rate. The target population included respondents with a small appointment at the VU (0,0-0,3 fte), with a guest account or employed as student assistant. Some of the drop-out responses confirm that external PhD candidates, staff with a small appointment and recently appointed staff did not participate.
- At the time of the integrity survey, two additional surveys were distributed; one survey from the University board on the opinion of policy at the VU, and one at FSS on the new working environment. The three surveys addressed a topic that were somewhat related, and may have caused survey fatigue.
- Even though we very explicitly addressed confidentiality, doubts about ensuring anonymity may have withheld employees from participating (as well as reluctance among the participating employees to answer the questions on personal characteristics as job category; only 152 respondents answered that question, 29 with 'rather not say').
- Lastly, the response in this type of research can be selective towards those employees who hold strong opinions on or have negative experiences with integrity. In other words (and as reported by respondents): these characteristics can influence the willingness to participate.

3.2 Distribution over faculties and categories

Cohort characteristics are summarized in Appendix 1 with information on the faculty the participants were employed at, the type and duration of job appointment⁸ and gender. The data presented concern the 305 respondents mentioned before (always a point for discussion, we acknowledge).

The distribution of respondents over the three faculties is in line with the number of employees. Comparing the percentage of respondents per faculty with the actual percentage of the target population, then FSS has about 5% more (34,1% of respondents, 29,6% of gamma faulty personnel), and Law -1%, and FEWEB -5%. That FSS has a bit more respondents than expected can be explained by the additional email from the research managers, and the fact that FSS as initiating faculty may have drawn more attention to the topic than the other two faculties.

The distribution of responses over the different job categories shows that almost all categories participated in the survey; the only group that is missing are postdocs (1 out of 182 known postdocs identified him or herself as a postdoc). Alternatively, postdocs could also be part of the big group of participants that did not report their position. Another explanation could be that postdocs have a high workload for both teaching and researcher, and combined with uncertainty over employment this may stimulate a focus on work, rather than participating in ancillary aspects of academic life.

165 of the participants answered the question on gender: 48% female and 52% male.⁹

⁸ A number of respondents mentioned more than one job category, incl. 'other'. They were classified under the category that seems most prominent. For example 'other and lecturer' under lecturer, 'PhD and lecturer' and 'PhD and staff' under PhD.

⁹ With clear differences between the faculties. A point for further analysis is whether this response resembles the differences in faculty's staff on gender.

The cohort in terms of size and duration of appointment differs a bit between respondents from the faculties. Respondents from Law tend to have shorter employment history (1-10 years), leaving those with 16+ almost entirely out of the picture. FSS is spread more evenly across the different categories, with most having a contract between 1-5 years. FEWEB has a lot of respondent who either work 1-5 or 16+ years. And both FSS and FEWEB have a number of respondents who do not share information on duration of employment.

These figures have to be taken into account when the results are interpreted, but overall the cohort of respondents that answered at least one of the questions in the survey represent the amount of employees in the three faculties.

4. Values in Academia

4.1 Values and barriers

The first aspect the survey addressed are the values that respondents find important in their work. Although in many codes of conduct for science specific values have been defined, these often address research practices: honesty in reporting findings, carefulness in data collection, and so forth. As the survey wants to investigate integrity in a broader sense, we thus need to take a broader view on values as well¹⁰. Therefore, we presented a number of values to the respondents that pertain to working in a (semi-public) organization, and asked them how important these values are to them.¹¹ The following values were addressed:

- integrity: acting in accordance with relevant moral values and norms;
- openness: acting open and transparent towards stakeholders on decisions and their implementation;
- participation: involving the environment and stakeholders in decision making and implementation;
- professionalism: acting with expertise, including learning from previous mistakes;
- accountability: acting willingly to justify and explain actions to relevant stakeholders;
- efficiency: acting to achieve results with minimal means;
- legitimacy: acting in line with preferences and support from the environment (incl. Society);
- lawfulness: acting in accordance with existing laws and rules;
- effectiveness: acting to achieve the desired goals/results;
- equality: treating equal cases equally.

¹⁰ See for example, the VSNU code of conduct on ‘Principles of good academic teaching and research’ that lists honesty and scrupulousness, reliability, verifiability, impartiality, independence and responsibility as key values. or the code of the European Science Foundation (2011) on research integrity with as values honesty, reliability, objectivity, impartiality and independence, openness and accessibility, duty of care, fairness in giving credit and responsibility.

¹¹ See De Graaf (2016) with a focus on values in academia, but also for example Van der Wal (2008) on values in the private and public sector and many others incl. Boud, 1990; Bruhn, 2008; Godecharle, Nemery, & Dierickx, 2014.

Table 2 clarifies that all presented values are seen as relevant (scaled as ‘very unimportant’ to ‘very important’ 1-5), with professionalism, openness and integrity and accountability among the top 4.

Table 2. Most important values, and values with most barriers

	Most important values Question: Please indicate how important each of these values is to your work (scale 1-5)	Mean	Values with most barriers Question: Please indicate if you experience any barriers in realizing this value in your work (scale 1-4)	Mean
1	Professionalism	4,52	Efficiency	2,15
2	Openness	4,49	Effectiveness	2,06
3	Integrity	4,45	Participation	1,91
4	Accountability	4,43	Openness	1,81
5	Equality	4,36	Legitimacy	1,71
6	Lawfulness	4,35	Equality	1,67
7	Effectiveness	4,17	Professionalism	1,67
8	Participation	4,10	Accountability	1,66
9	Legitimacy	3,95	Integrity	1,55
10	Efficiency	3,77	Lawfulness	1,38
<i>Mean scores for values, answer options ranged from 1(very unimportant) to 5 (very important), N varies between 301-303; and for barriers, answer options ranged from 1 (none) to 4 (a lot), N varies between 239-253.</i>				

After answering the question on the importance of values, respondents were asked indicate if they experienced any barriers in realizing these values in their work (on a scale ranging from 1 ‘none’, to 4 ‘a lot’). The top 5 barriers are on effectiveness, efficiency, participation, openness and legitimacy.

These patterns for all respondents seem to be shared by the whole academic community when we have a look at the two categories one might expect to be different: scientific and support staff (table 3). There are some differences between the values that are important for the two categories, but the similarities are most striking. That is even more clear for the barriers employees experience.

Table 3. Values and barriers ranked for support staff and scientific staff

	How important is this value is for your work?				Do you experience barriers in realizing this value in your work?			
	Scientific	M	Support	M	Scientific	M	Support	M
1	Professionalism	4,57	Openness	4,59	Efficiency	2,28	Efficiency	1,92
2	Integrity	4,53	Professionalism	4,44	Effectiveness	2,05	Openness	1,88
3	Openness	4,46	Accountability	4,41	Participation	1,96	Participation	1,84
4	Accountability	4,44	Equality	4,41	Legitimacy	1,70	Legitimacy	1,83
5	Equality	4,36	Integrity	4,41	Openness	1,66	Effectiveness	1,80
6	Lawfulness	4,34	Participation	4,37	Equality	1,65	Integrity	1,70
7	Effectiveness	4,27	Effectiveness	4,22	Accountability	1,58	Accountability	1,64
8	Participation	4,10	Lawfulness	4,15	Professionalism	1,55	Equality	1,64
9	Legitimacy	3,92	Legitimacy	4,04	Integrity	1,44	Professionalism	1,64
10	Efficiency	3,80	Efficiency	3,96	Lawfulness	1,31	Lawfulness	1,33
Support staff: department and faculty level; n=21-27 (varies between items); Scientific staff: PhD, Post Doc, Assistant professor, Associate professor, full professor, lecturers ; n= 80-91 (varies between items); For values, answer options ranged from 1(very unimportant) to 5 (very important), for barriers, answer options ranged from 1 (none) to 4 (a lot).								

If we look at the first four values and what they could mean in combination, the image of the *virtuous employee* emerges. A higher appreciation for professionalism, openness and integrity, and a lower appreciation for effectiveness, participation, legitimacy and efficiency, indicate that employees want to ‘do the right things’ based on professional expertise and personal moral standards, and be open and accountable about that.

If we turn to the barriers respondents experience, it is noteworthy that employees do not find difficulty in acting with expertise and integrity, and that accountability isn’t an issue either. They do, however, experience barriers with being open. This raises the question why employees feel barriers with being open, because of organizational, cultural or personal barriers? And if it’s organizational, what is it in the organization that raises this barrier? Furthermore, it is striking that what respondents value least, efficiency, also is reported to have the most barriers. This raises the question how the values and barriers are related, but we can only speculate on that.

4.2 Additional values and notes to barriers

Respondents were also invited to add values that they deem important. 40 respondents took the opportunity to add one or more values to the list. Without mentioning them all here, we note that the added values focus on different aspects: on the *individual* (e.g., individual responsibility and authenticity), on the *organizational culture* (respect, not gossiping, room for errors and forgiveness, collegiality, budgetary prudence), on *science* (reliability, replicability, peer review) and on the *societal role* (social justice, relevance and sustainability). The organizational values were most frequently mentioned.

We subsequently asked respondents for further comments on the barriers they experienced. They reported barriers that almost without exception focus on organizational aspects: bureaucracy or (trivial) administrative duties, and conflicting organizational processes and policy. The policy ranged from faculty or university policy, to the emergence of *an audit society*. Combined with the

rankings of both values and barriers, one can conclude that what respondents find least important is what bothers them most in accomplishment. As a respondent said: “Potential barriers for all the above [values] are primarily time-related. We are always struggling for time for the things we deem important and spending a lot of it on administrative issues or even trivial tasks”. But lack of room for discussing issues, not having the resources for doing one’s work properly, non-integer management, and lack of trust in colleagues was also mentioned.

4.3 Summary

Based on the outcomes we encounter much similarity in what the responding employees see as important values in their work, as well as in the barriers they experience in realizing a number of values. The results bring food for thought, are not easy to interpret, but the self-image of the ‘virtuous professional’ seems to summarize what is basic for the respondents: employees want to act with expertise and integrity, and want to be open and accountable about what they do. Organizational processes, administrative demands and conflicting policies are reported as the most experienced barriers to realizing what (responding) employees find important in their work. Openness in the organization is valued highly, but also encounters communicative and organizational barriers.

5. Organizational culture

In line with other research on integrity in organizations, the survey paid quite some attention to organizational culture. Organizations and the way they are run affect integrity in behavior, the prevention of integrity violations, and the promotion of an open culture that discusses integrity issues.¹² We also report in this section about related topics: ‘whom to talk to’ when employees experience integrity dilemmas and violations, possible negative consequences of reporting violations, and the perceptions of the integrity of different organizational levels.

5.1 Organizational culture

We obtained a view on how respondents experience the organizational culture, using and combining items from existing surveys¹³ on a variety of aspects. The most direct questions are nineteen items which asked to scale agreement with statements regarding the organizational culture.

The nineteen items offer a first impression of the organizational culture at the gamma faculties (table 4). In the work unit an open discussion is possible on the ethical dilemmas and unethical behavior of colleagues. though directly addressing each other’s behavior is seen as more difficult. The employees are also supportive of their managers with a positive judgement on their involvement and communication the content and importance of ethics and integrity, with hesitation on whether they are sufficiently critical of one another's behavior. The organization is seen as less supportive and involved in the topic. Many employees miss clarity on how they should behave,

¹² See for example on aspects of organizational culture and integrity: Victor & Cullen 1987, 1988; Paine, 1994; Kaptein, 1998; Treviño et al., 1999; Martinson et al., 2010; Crain, Martinson & Thrush, 2013; Macfarlane, Zhang & Pun, 2014; Huhtala et al., 2015.

¹³ Existing items from other research were used. See Treviño et al. (1999), Victor & Cullen (1987, 1988) and Kaptein (1998).

see no reward for ethical behavior and a substantial number agrees with ‘in this organization, people are mostly out for themselves’.

Table 4. Appreciation of organizational culture at the gamma cluster

	Total			Mean
Work entity level	(Strongly) disagree	Neutral	(Strongly) agree	
Within my work entity personal opinions can be expressed freely	8,0%	16,0%	76,0%	4,88
If a colleague acts unethically, he/she will appreciate it if I discuss it with him/her	11,7%	37,9%	50,4%	4,25
Within my work entity integrity dilemmas can be discussed openly	10,4%	32,9%	56,6%	4,41
Within my work entity colleagues address each other's unethical behavior	18,3%	54,5%	27,2%	3,71
Managerial level	(Strongly) disagree	Neutral	(Strongly) agree	
My manager communicates the importance of ethics and integrity well	12,1%	31,2%	56,7%	4,36
My manager communicates the values and principles we have to respect	14,1%	39,5%	46,4%	4,15
My manager takes reports of undesirable employee conduct seriously	8,5%	27,7%	63,8%	4,62
My manager makes fair and balanced decisions	10,7%	25,6%	63,6%	4,53
If my manager observes a colleague behaving unethically, he/she will call this colleague to account	8,0%	31,6%	60,3%	4,49
Managers are sufficiently critical of one another's behavior	24,5%	46,9%	28,6%	3,60
Organizational level	(Strongly) disagree	Neutral	(Strongly) agree	
The organization makes it sufficiently clear how we should behave	22,0%	53,1%	24,9%	3,59
In our organization people are expected to work as efficiently as possible	14,7%	43,7%	41,6%	4,08
In this organization it is expected that you will always do what is right for the organization and the public	7,4%	46,3%	46,3%	4,24
People are expected to comply with the law and professional standards over and above other considerations	7,0%	44,6%	48,3%	4,37
In this organization, people are mostly out for themselves	22,4%	38,8%	38,8%	3,80
In our organization employees are willing to violate the law to achieve their performance targets	50,2%	36,9%	12,9%	2,80
Within our organization, ethical conduct is rewarded	32,0%	57,4%	10,7%	3,11
In this organization, people are expected to follow their own personal and moral beliefs	7,5%	50,4%	42,1%	4,14
<i>Scale of 6 answer categories clustered in (strongly) disagree, (strongly) agree and a middle range; N varies between 235-250.</i>				

In addition to this overall image of the three faculties, it seems relevant to note that there are also a number of differences which might lead to further reflection per faculty: concerning openness,

clarity about ethics by the managers, pressure for efficiency and orientation towards personal interests (see Table 1 in Appendix 2).

5.2 Whom to talk to about suspected violations?

In addition to trying to understand how respondents experience the organizational culture, we also asked whom they would talk to when they suspected a violation of integrity.¹⁴ If we rank the list of people that respondents would probably or definitely talk to, then the outcome is consistent with the image of the organization (table 5): the ‘direct boss’ is the prime person to talk to, followed by the head of unit. We did not find any relevant differences between faculties, gender and position. Remarkable is, furthermore, that respondents would also address the suspect of misconduct, and that colleagues at the VU and from outside the VU are in the middle range.

Table 5. Talking about violations

<i>If you suspect a violation of integrity, whom would you talk to?</i>	(Strongly) disagree	Neutral	(Strongly) agree	I don't know
The person whom it concerns	11,0%	30,6%	54,1%	4,3%
A relative or friend	20,1%	11,3%	65,2%	3,4%
The head of the department/unit	14,6%	25,9%	52,7%	6,8%
My direct boss	9,1%	20,1%	66,0%	4,8%
A colleague, who isn't head of the department/unit	21,6%	20,7%	51,4%	6,3%
A confidential counselor integrity	24,6%	27,1%	41,5%	6,8%
The dean of the faculty	57,0%	23,2%	15,5%	4,3%
The managing director of the faculty	67,6%	18,8%	9,2%	4,3%
A member of the Board of the VU	82,1%	12,6%	1,0%	4,3%
A befriended colleague outside the faculty/VU	33,3%	28,0%	32,9%	5,8%
<i>N varies between 204-209.</i>				

Finally, respondents aren't very likely to turn to board members of the faculty or university, and it is remarkable that confidential counsellors are not the most likely advisor. Of course, when respondents can have a good conversation with their boss or head of department further contact with a confidential counsellor may be unnecessary. On the other hand: confidential counsellors are supposed to fulfill the role of key entry point in the formal procedures for reporting violations. In response to another question respondents from the three faculties indicated that the confidential counsellor is (very) unknown (Law 60,3%; FSS 68,9%; FEWEB 68,5%), although 70% believe this would be a (very) important instrument to stimulate integrity. This suggests that the new university policy for confidential counsellors (2016) is in need for more extensive communication.

5.3 Consequences of reporting violations

Next to the questions on the organizational culture and ‘whom to talk to’ about possible violations, we also included items on perceptions of the consequences of reporting integrity violations for the person reporting outside the work unit and the person charged of misconduct (table 6).

¹⁴ In this report we describe *intended* behavior, not the actual reporting of violations.

Table 6. Perceived consequences of reporting for reporter and accused

Statement	Faculty (N)	(Strongly) disagree	Neutral	(Strongly) agree
“The reporting of an (alleged) violation of integrity has negative consequences for those reporting”	LAW (47)	19,1%	68,1%	12,8%
	FSS (70)	25,7%	55,7%	18,6%
	FEWEB (90)	42,2%	36,7%	21,1%
“The reporting of an (alleged) violation of integrity has negative consequences for the person suspected, independent of the results of the report”	LAW (47)	19,1%	72,3%	8,5%
	FSS (70)	14,3%	57,1%	28,6%
	FEWEB (88)	21,6%	39,8%	38,6%

A minority of the respondents signal negative consequences for the reporting whistleblower, most ‘neither agree nor disagree’ with those consequences and a minority disagrees with negative consequences. This result is open for interpretation, with possible criticism in terms of ‘quite a number of employees’ seem to fear the consequences, contrary to the result ‘most respondents are less negative’. The same type of discussion is valid for the expected consequences for the person charged of misconduct (independent of the result of the accusations). Table 6 displays the results per faculty which might lead to additional reflection, in particular on the possible negative consequences for the suspected person.

5.4 Perception of integrity of units

We also asked respondents to grade (from 1 to 10) ‘organizational units’ with regard to integrity. The units or university levels concerned the direct colleagues, the work unit, the manager, the faculty board and the university board. As a general trend we see that from close by (direct colleagues) to distant (university boards), respondents become more critical (table 7, last column).

We expected that those perceptions might be related to the time of employment of respondents at the VU. The table clarifies that respondents that ‘would rather not say’ how long they worked at the faculties are most critical (especially about their own faculty board), followed by those with an appointment between 6-10 years.

When the three faculties are compared, FFS employees are most critical on all items, although the differences should not be exaggerated (see Appendix 2).

Table 7. How would you grade (from 1 to 10) the following units with regard to integrity?

Grade for integrity (from 1-10)	< 1 year (N=9-10)	1-5 years (N=54-55)	6-10 years (N=33-34)	11-15 years (N=28)	> 15 years (N=33-34)	I would rather not say (N=24-25)	Average gamma cluster (N=183-186)
My direct colleagues	7,90	8,17	8,00	8,04	8,31	7,88	8,09
My own work unit/ department	8,20	8,09	7,35	7,64	7,71	6,96	7,67
The management of my unit/department	7,70	7,73	7,06	7,04	7,73	6,38	7,32
The board of my faculty	7,22	7,11	6,52	7,11	6,79	5,88	6,78
The board of the VU	6,78	6,80	6,15	7,07	6,21	6,28	6,54

5.5 Summary

The presented information on aspects of ‘organizational culture’ offers food for thought, with a differentiated picture in terms of the respondents’ ideas and experiences. In the work units an open discussion is possible on the ethical dilemmas and unethical behavior of colleagues, though directly addressing each other’s behavior seems more difficult. Direct management is appreciated and deemed important for fostering integrity in the workspace, with some hesitation on whether leadership is critical enough among themselves. Many respondents miss clarity on the values and norms by the organization. Reporting integrity violations, is seen as risky by a minority, not to be ignored though. Confidential counsellors that might assist and help employees confronted with dilemma’s, also on reporting, are not clearly recognized.

6. Integrity violations

An important aspect of the survey was to get an overview of the integrity violations employees experience(d).¹⁵ As we wanted to pay due attention to integrity in research, education and organization, we also addressed these three aspects in the items on violations. Education was addressed in a separate item on integrity in education, and research and organization were combined. Respondents were invited to rank 15 types of violations on a five point scale ranging from never, once, a couple of times, frequently, to often (encountered during the last two years), and in open responses they could provide additional types of violations and descriptions of what they had encountered.

An important preliminary remark is on the meaning of the data. We asked people how often they had ‘encountered’ a violation, not how often they had been personally involved with one. This invites overestimation of the data on reporting. E.g., multiple respondents can refer to the same incident that occurred. As some potential cases of misconduct at the VU have been reported in national media, many people may have been thinking of this incident when answering this question. Imagine the case of Diederik Stapel, who made up research data. If you would ask members of his former faculty if they had ever encountered the fabrication of data, the Stapel affair alone could yield a response of 100%. This doesn’t imply that this entire faculty is into data fabrication.

Following an overview of the results for the three faculties, we will discuss differences between the faculties, between job categories and what respondents encounter, the narrative reports on integrity violation, integrity violations in education, and the reporting of problems or issues of integrity to the competent authorities.

6.1 Encountered integrity violations

The question in the survey on presented types of integrity violations was “Which problems in relation to integrity did you encounter in the last two years?”. Table 8 presents the answers by all

¹⁵ With many sources, incl. on (types of) integrity violations (Huberts, 2014; de Graaf and Strüwer, 2014) as well as on violations in academia and research (Huberts, 2005; Fanelli, 2009; Dubois et al., 2013; van Kolschooten, 2013; Bouter et al., 2016).

respondents with as (combined) categories ‘never’, ‘once or couple of times’, ‘frequently/often’ and ‘does not apply’ (for the respondent).

None of the selected integrity violations has been encountered by a majority of the respondents during the last two years. But it is also clear there are big differences between the types of integrity problems, with responses on a number of violations with percentages that offer food for thought. More than 30% of the respondents have encountered ‘Using the ideas of others without permission or proper references’, ‘Favoritism: favoring friends, family, colleagues or students’, ‘Dubious or selective presenting or analyzing of data’, ‘Abuse of power towards colleagues (including authorship)’, ‘Inappropriate behavior, discrimination and/or intimidation of colleagues, students or others’ and ‘Waste of resources or breach of contract’.

After these six encountered violations, the frequency drops (please take notice that fraud in education, was also surveyed as a separate topic). This shows a demarcation between more common violations, and the rarer ones. At the same time, it is remarkable that *all* of the presented types of violations were encountered by respondents from all faculties. In other words, we did not present types of violations that were alien to academia.

Over all the data also clarifies that the encountered integrity violations at the gamma faculties relate to misconduct in research, education and the organization/management. ‘Using the ideas from others’, ‘Dubious or selective presenting or analyzing of data’ concern violation of research integrity. Their position in the ranking is alternated with violations like ‘favoritism’, ‘inappropriate behavior’, ‘abuse of power’ and ‘waste of resources’, violations also relating to the broader organization. Also, integrity issues in education were widely discussed and reported by respondents.

Table 8. Ranking of encountered academic misconduct. Question: “Which problems in relation to integrity did you encounter in the last two years?”

Types of violations	Never	Once-a couple of times	Frequently -often	Does not apply	Total
Using the ideas of others without permission or proper references	51,0% (101)	34,8% (69)	5,6% (11)	8,6% (17)	198
Favoritism: favoring friends, family, colleagues or students	52,3% (103)	26,4% (52)	12,7% (25)	8,6% (17)	197
Dubious or selective presenting or analyzing of data	54,0% (107)	25,8% (51)	6,1% (12)	14,1% (28)	198
Abuse of power towards colleagues (including authorship)	57,4% (113)	23,9% (47)	7,6% (15)	11,2% (22)	197
Inappropriate behavior, discrimination and/or intimidation of colleagues, students or others	57,5% (111)	32,6% (63)	3,1% (6)	6,7% (13)	193
Waste of resources or breach of contract	59,7% (117)	23,5% (46)	8,7% (17)	8,2% (16)	196
Fraud in education	66,5% (129)	19,6% (38)	3,1% (6)	10,8% (21)	194

Unjust influence of third parties (including the commissioning partner)	70,2% (139)	13,6% (27)	3,5% (7)	12,6% (25)	198
Not being open about conflicting ancillary positions or roles elsewhere	71,6% (141)	11,2% (22)	3,6% (7)	13,7% (27)	197
Fraud or theft of the organization	76,1% (150)	16,2% (32)	2,0% (4)	5,6% (11)	197
Conflict between job appointment at the VU and an ancillary position	76,6% (151)	12,7% (25)	2,0% (4)	8,6% (17)	197
Abuse of authority in engaging with research participants	77,2% (152)	2,5% (5)	1,5% (3)	18,8% (37)	197
Abuse of (access to) confidential information	78,6% (154)	6,6% (13)	1,0% (2)	13,8% (27)	196
Falsifying or manipulating research data	79,7% (157)	10,2% (20)	0,5% (1)	9,6% (19)	197
Misconduct outside work	85,3% (168)	5,1% (10)	0,5% (1)	9,1% (18)	197
Corruption or bribing by third parties	89,8% (177)	2,5% (5)	0,5% (1)	7,1% (14)	197

6.2 Differences between faculties

Contrary to what might be expected for the different faculties and disciplines, the differences between the respondents from the faculties were limited. 'Using ideas from others' is, for example, a pertinent issue at all three faculties, as is 'inappropriate behavior'. A difference is that 'favoritism' and 'abuse of power' rank higher for FSS and FEWEB respondents, and seems less an issue at the faculty of Law. At that faculty 'fraud in education' is more troublesome, for example on 'students cheating' (this will be discussed below in greater detail). And this faculty has 'conflict between different jobs' and 'unjust influence by third parties' also higher on the agenda. Appendix 3 lists the violations in order of means per faculty.

6.3 Job categories and reported violations

Next to the general overview of encountered violations and the differences between faculties, it is relevant to know whether respondents from a certain job category encounter other types of violations than the rest. Do PhD researchers, for example, encounter other kinds of violations than professors or support staff? To start with the division of encountered violations over position, we split the results according to the job respondents reported (table 9).

Table 9. Average scores per job category for encountered integrity problems the last two years

	Total 122- 140	PhD 12-14	Ass prof 19- 22	Assoc prof 14-18	Prof 27- 28	Sup staff (dep) 4-5	Sup- port (fac) 13-19	Rather not say 25-29
Favoritism: favoring friends, family, colleagues or students	1,96	1,93	2,00	2,29	1,38	1,80	1,81	2,48
Using the ideas of others without permission or proper references	1,80	1,79	1,64	2,29	1,97	1,00	1,14	1,82
Inappropriate behavior, discrimination, intimidation of colleagues, students or others	1,74	1,23	1,62	2,06	1,48	1,25	1,68	2,25

Waste of resources or breach of contract	1,72	1,23	1,90	2,06	1,52	2,20	1,67	1,73
Abuse of power towards colleagues (including authorship)	1,71	1,38	1,58	1,76	1,41	1,75	1,13	2,46
Dubious or selective presenting or analyzing of data	1,71	1,77	1,52	2,00	1,62	1,00	1,00	2,19
Fraud in education	1,42	1,00	1,50	1,50	1,19	1,40	1,71	1,62
Fraud or theft of the organization	1,40	1,36	1,18	1,28	1,24	1,40	1,88	1,45
Unjust influence of third parties (including commissioning partner)	1,39	1,54	1,29	1,59	1,38	1,00	1,15	1,50
Not being open about conflicting ancillary positions or roles elsewhere	1,36	1,33	1,38	1,24	1,31	1,00	1,29	1,56
Conflict between job appointment at the VU and an ancillary position	1,31	1,50	1,36	1,33	1,24	1,00	1,07	1,46
Falsifying or manipulating research data	1,20	1,15	1,19	1,53	1,07	1,00	1,19	1,26
Abuse of (access to) confidential information	1,13	1,00	1,20	1,24	1,00	1,25	1,31	1,08
Abuse of authority in engaging with research participants	1,12	1,00	1,00	1,14	1,00	1,25	1,00	1,42
Misconduct outside work	1,10	1,00	1,00	1,29	1,14	1,20	1,18	1,04
Corruption or bring by third parties	1,07	1,00	1,00	1,00	1,00	1,00	1,28	1,11
<i>Answer options ranging from 1 'never' to 5 'often'.</i>								

29 Respondents answered the question on their job category with 'I would rather not say' or 'other', and from other items we know that these respondents are more critical of the organization than others. Their ratings on the violations items show a remarkable difference from the other groups.

Table 9 presents a complicated picture, with the 'mean per job category with 1.0 'no one ever encountered' the integrity violation and 5.0 everyone often encountered it (during the last two years). The mean score for all respondents on for example 'favoritism' (favoring friends, family, colleagues or students) is 1.96, based on 52% with 'never encountered', 26% 'once or a couple of times', 13% 'frequently/often' and 9% 'does not apply' (Table 8).

A number of observations seem relevant.

First, for the job categories, the highest score on 9 of the 16 violations is that of the associate professors. Of course we have to be careful with interpretations because the group is rather small, but this result is remarkable and open for further reflection and interpretation. Are they well embedded in the faculty with more information than others, or is their own position vulnerable with more own experiences with violations? Contrary to that, is what professors report....

Second, the respondents who preferred not to answer the question on their position or job, rather often encounter a number of violations, with as top three ‘abuse of power’, ‘inappropriate behavior’ and ‘favoritism’. This may be related to their position in the group and organization, possible feelings of insecurity, also leading to anonymity.

Third, it is interesting to have a look at the different job categories and the type of violations they are confronted with. For PhD’s for example, favoritism, using the ideas of others without permission or proper references and dubious or selective presenting or analyzing of data score highest. Again: we have to be careful in interpretation, the numbers are small and most PhD’s never encounter those violations, but to neglect the experiences of PhD’s who report this would also be doubtful. Another category is support staff, with signals on in particular ‘waste of resources’, ‘fraud or theft from the organization’, ‘favoritism’ and fraud in education’. We also note that the small number of employees who report possible cases of ‘corruption or bribing by third parties’ are staff members (possibly based on their knowledge on projects with external partners?).

Fourth, the relevance of further reflection on the character of ethics and integrity dilemmas and problems at academia is also supported by the data per job category. We present overall results in Table 8, Table 9 shows which job categories are confronted with them. An overall topic seems ‘favoritism’, listed by all categories among the number 1, 2 or 3 violation, though professors rank it lower (place 6). The professor’s position might explain that... (not any more in job promotion procedures themselves, and -suggestive we realize- with the power to favor more than possible victims of favoritism).

6.4 Narrative responses about integrity violations

In the narrative data and the open responses, additional information on how respondents experience integrity was shared. With regard to research, respondents are concerned not just about the outright violations of integrity in research (e.g., a postdoc that secretly uses data collected by a PhD without permission). Sloppiness, unintended mistakes, the lack of skills and so forth are also mentioned as a point of concern.

Furthermore, although the quantitative data do not indicate ghost authors to be an issue of great concern, the narrative data shows that it is nevertheless is a problem for some respondents. In increasing the chances to get a contract renewed or to get tenure, some respondents have accepted seniors as authors (without them making an actual contribution), hence drawing the issue of ghost authors in the realm of abuse of power/authority.

More in general, some respondents report their concern about the way in which decisions about tenure, promotion or discontinuation are being made. What seemed to be identical cases for contracts and tenure, had opposite outcomes, in their view. Others mentioned that decisions to appoint lacked convincing clarification. In general, concerns for tenure and contracts are in line with the conclusions of the VU survey on the future of the VU.¹⁶

¹⁶ With research by Ruigrok NetPanel in 2016. In the summer of 2016, the VU adopted a new tenure track policy. Future will tell if that has changed things for the better.

Another mentioned integrity problem concerns ancillary positions conflicting with responsibilities for the VU. Sometimes on a small scale (individual employees who were messing about with responsibilities for the VU and for another contract) but also on the scale of research groups, e.g., when a professor with an ancillary position lets the interests of the other position directly influence research and PhD projects. Some respondents witnessed conflicts of interests when friends or family of a faculty employee were hired for a job for which they lacked the qualifications. Declaring expenses was also reported as an integrity violation, for example when people declared expenses for private affairs, or when they had already been compensated for the expenses by a third party.

More general organizational policies and conditions were also mentioned. In order to be effective and to deliver quality in research or education, staff is hindered by all kinds of bureaucratic policies. Another concern is how decisions are made, for example in real estate, in the reorganization of ICT and in attracting expensive staff from the US. Some respondents call this a waste of resources.

6.5 VU respondents and civil servants compared

Some of the types of violations that were surveyed at the Gamma cluster were also used in a large integrity survey amongst civil servants (De Graaf & Struwer, 2014). This provides us with the opportunity to compare VU employees and civil servants with each other (it should be noted that respondents from academia are also included in the civil servants survey, alongside with police officers, governmental officials, and so forth).

It is striking to see for the items that appear in both surveys, that the percentage of employees that has witnessed types of integrity violations during the last two years is very comparable, as is the ranking of these violations (table 10). This gives support to the view that broadening the scope on integrity policy in universities is necessary in order to tackle integrity violations other than research integrity violations: they do occur and universities are not that different from other organizations in the public domain.

Table 10. Encountered integrity violations in academia and public organizations (% of respondents that report encountering one or more violations during the last two years)

Encountered Integrity Violations	Civil servants (N = 2035)	VU (N=193- 198)
Abuse of power (of various kinds)	34,4%	35,6%
Inappropriate behavior, discrimination and/or intimidation of colleagues or others (VU survey: included students)	44,2%	35,8%
Waste of resources or breach of contract	39,0%	32,1%
Fraud or theft of the organization	18,1%	18,3%
Conflict between job appointment (at the VU) and an ancillary position	19,0%	14,7%
Abuse of (access to) confidential information	13,5%	7,7%
Misconduct outside work	6,6%	5,6%
Corruption or bribing by third parties	4,7%	3,0%

Furthermore, given the similarities of the experienced integrity problems and violations, it seems useful and challenging to compare the tools and instruments in different public sectors and organizations meant to prevent or reduce misconduct of this kind, with lessons to be learnt concerning their effectiveness. This seems worthwhile for academia because of the relevance for the whole organization, but this also concerns more specifically research integrity violations (for which abuse of power, intimidation and discrimination and conflicts of interests do matter as well).

6.6 Personal involvement in violations

Earlier, we noted that talking about integrity *questions* with colleagues or the managers is part of the organizational culture, but that being open about integrity *violations* is a greater challenge. In addition to the overview of the violations respondents encountered, we now discuss the reporting behavior of those respondents who stated that they have been personally involved in cases.

The number of respondents who had personal experiences with integrity violations was, as expected, a lot smaller than those who encountered violations in general. Many also refrained from answering this question. 58 respondents have been personally involved in the last 10 years in a case where integrity was violated (table 11). 6 did not clarify their role, of the other 52, 20 made a complaint on behalf of themselves, 6 on behalf of a third party, 8 respondents were accused of a violation and 18 were involved as councilor or adviser.

The question whether the cases resulted in *formal* complaints/reports and/or investigations was answered by 56 respondents, 33 said yes, 22 said no, 1 did not want to say.

Table 11. Respondents personally involved in integrity violations and their role (last 10 years)

Personal involvement in violations	N
Accuser and victim	20
Accuser, not victim	6
Accused	8
Counsellor/advisor	18
Rather not say	3
No answer on role	3
Total	58

We also asked these respondents to express an opinion on how things were handled; they could discuss their own role, the support they have had, and the actions following the report. The accusers (and victims) and the accused reported mostly in extremes: they were either satisfied or dissatisfied with the way their complaint was handled. That includes their own role; some were satisfied with the way they handled things, others dissatisfied. More confident of their own role are the counselors; all of them were (very) satisfied with how they handled things. Their judgment on the process, outcomes and actions following a case differ, experiences are mixed. The anonymous respondents are mostly negative about these aspects, and positive about their own role.

All respondents were asked whether they would (again) report when they would encounter an integrity issue in the future (n=186). A majority would report (56%), a minority would not (6%) and 36% answered ‘I don’t know yet’.

In addition, we see some notable differences between the three faculties. Respondents from Law are very satisfied with all aspects of the reporting and the follow up, whereas FSS and FEWEB respondents show a wide variety in how they experienced things. This is reflected in the responses to the question on reporting in the future. Only one from Law rejects the idea of reporting future violations, for the others (n= 45) it depends on the case at hand, or it is a matter of principle. FSS respondents (n=61) have similar convictions and doubts, but also have more explicit refusals of reporting violations in the future, as do those from FEWEB (n=80).

In the narrative data there are also responses that indicate that the reporting system demonstrates flaws. This not just concerns respondents who are disappointed by the lack of support from the ombudsman, or who disagree with the decisions taken. There is also a lack of feedback on reports. The lack of reporting back to the whistle blower stimulates a fatalistic attitude: it is useless to report because nothing is done with it. The effect of such negative experiences on how respondents evaluate future encounters with integrity violations should not be underestimated.

From the open responses we see a very skeptical attitude towards integrity policy by those who had negative experiences: distrust towards the VU ombudsman (now replaced by multiple confidential counsellors and another organization for reporting and investigating violations) and towards the VU board (e.g., for making unjust decisions) doesn’t wear easily. Another mentioned concern related to how violations are handled is the slip stream effect, which is about people whose actions are being scrutinized because of their relation to someone who is under investigation.

6.7 Integrity violations in education

We now turn to integrity violations in education, as reported by teaching staff and other staff members that are involved in (the organization of) education. In a similar fashion as with the other questions on violations, we presented respondents with a list of potential violations, and asked them to indicate how often they had encountered this (from never to often). The results are in table 12 and 13.

Table 12. Integrity violations in education

Types of violations	Never	Once-A couple of times	Frequently- Often	Does not apply	N
Plagiarism (copying material without proper referencing)	10,3% (14)	45,6% (62)	42,6% (58)	1,5% (2)	136
Cheating on exams	38,5% (52)	40,7% (55)	11,1% (15)	9,6% (13)	135
Manipulating lecturers	47,8% (65)	36,0% (49)	9,6% (13)	6,6 (9)	136
In appropriate behavior, e.g., blackmailing /intimidation of lecturer or fellow student	52,6% (70)	39,8% (53)	5,3% (7)	2,3% (3)	133
Manipulating or fabricating data in research projects	66,9% (89)	19,5% (26)	4,5% (6)	9,0% (12)	133
Submitting work which completed by a (paid) third party	69,9% (93)	18,8% (25)	2,3% (3)	9,0% (12)	133
<i>As multiple respondent may refer to the same incident, this number should not be taken as a total number of violations. Question: "Which problems in relation to integrity do you encounter with students?"</i>					

The seriousness and extent of integrity violations in education is clear. Many teachers and staff signal violations by students. That plagiarism and cheating in exams top the list of most frequent violations is not that surprising; but it remains a point of concern that students willingly or unwillingly do not apply the basic rules of (academic) education and research. A finding of even greater concern is that ‘inappropriate behavior’ and manipulating lecturers aren’t a rarity, especially not at Law and FSS (see data per faculty in table 13). Another remarkable difference concerns ‘cheating on exams’ which is more common at the faculty of Law than elsewhere.

A form of fraud that was added by a few respondents is the stealing and/or reselling of educational material. Course books, lectures and exam questions are traded on the internet, facilitating cheating on exams.

Table 13. Integrity violations in education per faculty

Perceived violations in student behavior (total once-often)	Law (n=26)	FSS (n=47-50)	FEWEB (n=58-60)
Plagiarism (copying material without proper referencing)	92,3%	92%	83,3%
Cheating on exams	76,9%	42,9%	48,3%
Manipulating lecturers	46,2%	52%	40%
In appropriate behavior, e.g., blackmailing/intimidation of lecturer or fellow student	69,2%	49%	31%
Manipulating or fabricating data in research projects	23,1%	27,7%	21,7%
Submitting work which completed by a (paid) third party	19,2%	25%	18,6%
<i>This lists how many respondents encountered this per faculty. As multiple respondent may refer to the same incident, this number should not be taken as a total number of violations. Question: "Which problems in relation to integrity do you encounter with students?"</i>			

6.8 Reporting violations in education

We also asked whether respondents reported the perceived violation in education to the board of examiners or the educational management, and why they did so. The results offer a mixed picture, with different results per type of violation. Plagiarism for example was reported by 54 of the 89 staff members responding, cheating on exams by 26 of 46, but manipulating lecturers only by 8 out of 40 and inappropriate behavior (incl. intimidation) by 14 of 40.

A first motivation for reporting is that the rules are plain and simple, and reporting violations is standard procedure, or part of the duties as a teacher. FSS presented this argument most often. But a fair amount of comments nuance this rule perspective, by adding that it depends on the case at hand. When the violation is mild, early in the student's career (e.g., first years), or a good opportunity to let students learn from their mistakes, then teaching staff doesn't report. Nor do they report when they can handle things themselves (whether or not after discussing this with colleagues), for example by addressing the student on his or her behavior or by letting the student fail. Some FEWEB respondents were demotivated to report violations because of earlier, disappointing experiences: they believed the measures following their report were too soft (or no action was taken at all).

Violations such as plagiarism and inappropriate behavior do not seem to put teaching staff in doubt over what to do: with some exceptions the violations can be proven or detected and appropriate measures can be taken. There is, however, a grey area where violations can only be suspected. This problem is most prominent for detecting work that was completed by someone else than the student: quite some respondents had suspected this to be the case, but they could not present evidence. What is also hard to prove at the faculty of Law is plagiarism of published court rulings, and other judicial material. These sources aren't included in the resources of plagiarism scanners, and hence plagiarism of these sources is not detected easily.

6.9 Summary

A lot of survey data on the integrity violations encountered by respondents (and how they deal with that) have been presented, with first the focus on all participating employees and their

experiences in multifold commitments and tasks (incl. research and support), and afterwards the focus on education and students behavior. A number of summarizing and concluding remarks seem appropriate.

The data presented were rather descriptive, we acknowledge, giving an overview of the survey results, with some reference to additional remarks by respondents and some comparison with other public organizations.

The overall image might be summarized with the metaphor ‘the glass is half full and half empty’, with elements that are a cause for optimism (half full) as well as or more critical and sometimes pessimist interpretations (half empty). There is on the one hand no reason for exaggeration of the integrity problems and violations present at the gamma faculties. For example, a majority of the respondents encountered no integrity violation during the last two years and most employees are willing to report violations when they encounter them. On the other hand, the data offers a lot of information for the conclusion that integrity dilemma’s and violations are present and should be taken seriously. This concerns a variety of problems, with more than 30% of the respondents having encountered ‘Misusing the ideas of others’, ‘Favoritism’, ‘Dubious handling of data’, ‘Abuse of power’, ‘Discrimination and/or intimidation’ and ‘Waste of resources’. The percentages are even higher for experiences with integrity violations by students (in particular plagiarism and cheating during exams, but also manipulation of teachers and intimidation).

Comparison between the three faculties on what has been reported as violations in research, organization and education shows slight variation, with some food for thought, but across the board there are no major differences.

The data were compared with data from a similar survey in the public sector, with surprisingly many similarities on the signaled occurrence of types of integrity violations. With food for thought on how special a university is on what employees experience, as well as with the potential to learn for policy experiences in different sectors.

Satisfaction over how actual reports of violations were handled differs. Reasons for not reporting future violations should be a point of concern. In education, reporting depends on the evidence a lecturer actually has. The problem of plagiarism and fraud by students is likely to be bigger due to these causes of underreporting.

7. Data storage and publication practices in research

A number of topics with more specific relevance for research integrity were surveyed solely amongst respondents involved in research: publication practices and data storage and data sharing.

7.1 Publication practices

An important aspect of integrity in ‘academic publishing’ concerns authorship. How prominent is ‘ghost authorship’, referring to people who did not contribute to the study in any substantive sense, but who nevertheless appear as authors. Many journals and integrity codes therefore define what it means to be an author, and increasingly journals publish the type of contribution to the article of each author. What justifies authorship differs between disciplines, we therefore asked respondents

to list what they regard as relevant contributions to justify authorship. Table 14 clarifies what respondents see as a contribution to a publications that justifies authorship.

Table 14. Respondents' ranking of what would justify authorship

What would justify authorship?	%	N
Active writing of the paper	99,2%	116
Being the main researcher	90,6%	106
Being involved in collecting of analyzing data	80,3%	94
Involved in the design of the study	59,0%	69
Developer and author of the used methods/conceptual framework	52,1%	61
Supervisor of a PhD candidate, who wrote the article together with the co-supervisors	18,8%	22
Involved in acquiring funding	12,8%	15
Strategic partner for the research group	8,6%	10
Head of the research group	7,7%	9
Having provided feedback once on a concept version of the paper	6,0%	7
<i>Percentage of the respondents that answered this question (total n=117), what they think would justify authorship.</i>		

Looking at the three faculties together, respondents are clear on what justifies authorship: active writing of the paper, being the main researcher and being involved in collecting of analyzing data score very high (active authorship), followed at some distance by involvement in the design of the study and the development of the used methods/conceptual framework (supported authorship). Much more doubt exists on criteria that are contextual: being the supervisor, providing funding, a strategic partner. or head of the research group. These appear no far less obvious reasons for being an author, which shows enormous differences other sciences (in the the (bio)medical sciences the head of the group is for example almost always listed as author).

7.2 Authorship in PhD projects

A special point of attention in publishing is the relation between PhD and supervisor. It is an often heard complaint that supervisors join in on the work of PhD's, without having made a contribution beyond providing some feedback. If we split the data into job categories, we see remarkable differences in perceptions: none of the (full) professors who answered this question agrees with the idea that the role of supervisor justifies authorship, whereas some PhD's (4 of the 17 that reported their function) belief this *is* justified...

7.3 Experiences with ghost authors¹⁷

We also asked respondents for their experiences with ghost authors. Looking at table 15, we see that very few researchers have been ghost author themselves, though the frequency of having encountered ghost authors increases when it concerns articles they have been involved in (but with which they weren't lead author), and articles they were not involved in. Of course, cautiousness

¹⁷ Defined in the survey as being listed as an author without making a contribution; not as writing a paper without receiving credentials.

in interpretation is important (the number of articles from colleagues is higher than what someone publishes himself), but the data suggest that the topic is relevant, with some differences between faculties (at FSS more researchers encounter ghost authors, followed closely by FEWEB).

Table 15. Experiences with (ghost) authorship

Question	N	Never (%)	Seldom (%)	Sometimes (%)	Often (%)	don't know no opinion (%)
I have been listed as a co-author on a paper, whilst I did not contribute to it at all.	Law (n=17)	88,2	0,0	0,0	0,0	11,8
	FSS (n=51)	88,2	9,8	0,0	0,0	2,0
	Feweb (n=48)	83,3	12,5	0,0	0,0	4,2
On an article with which I was author, someone was listed as an author without making a contribution.	Law (n=17)	58,8	5,9	11,8	0,0	23,5
	FSS (n=51)	45,1	31,4	11,8	5,9	5,9
	Feweb (n=47)	57,4	29,8	10,6	0,0	2,1
With articles from colleagues. with which I am not involved, someone was listed as an author without making a contribution.	Law (n=17)	17,6	5,9	17,6	5,9	52,9
	FSS (n=50)	8,0	22,0	28,0	10,0	32,0
	Feweb (n=46)	21,7	21,7	21,7	10,9	23,9

This brings us to another authorship aspect we surveyed: the troubles in selecting authors (table 16). Although deciding who authors are, sometimes or often is a burdensome process (especially at FSS: 46% against 24% at Law and 23% at FEWEB), respondents in general seem to agree with the results of the author selection process.

Table 16. The burden of determining authorship, divided over the three faculties

Determining who the authors are, is a burdensome process.	Never (%)	Seldom (%)	Sometimes (%)	Often & Always (%)	Don't know/no opinion (%)
Law (n=17)	29,4	35,3	17,6	5,9	11,8
FSS (n=50)	22,0	28,0	44,0	2,0	4,0
FEWEB (n=48)	18,8	52,1	20,8	2,1	6,3

7.4 Data storage and security

An important issue of research integrity is that the data that is being collected is also handled in an ethical fashion. The challenges for securing digital data against inquisitive governments, hackers and computer viruses are increasing, and this echoes through in more stringent policies on the storage of data. In order to understand the data storage practices in the gamma cluster, this topic was included in the survey. We asked respondents who participate in research or research policy to report where they store their research data, and how secure against abuse they think these locations are. Table 17 ranks the most frequently used locations or media for data storage.

With the challenges to data security in mind, it is first of all striking the respondents quite often use means for data storage that are deemed insecure (either because they are prone to be hacked or because the means are not protected by Dutch law, e.g. because the service is located in the US).

Respondents could list what other means of data storage they used, and dedicated places for data storage outside the VU were mentioned frequently, such as the Open science foundation, the Central bureau for Statistics or a special server. One respondent stored data on an encrypted USB drive, stored in a safe.

Table 17. Most frequently used sources for data storage, and the perceived safety of these sources

On which medium do you store research data /how safe do you think it is?	Used by researchers	(Very) unsafe	Not particularly (un)safe	(Very) safe	Don't know	Total	Security classification VU Cert
Hard drive on private computer/laptop/iPad/smartphone	87	16%	27%	53%	4%	110	Public
Portable data storage (e.g., USB drive, portable hard drive)	69	41%	21%	32%	6%	111	Public
VU network storage (H: and G: drives)	67	7%	12%	57%	24%	113	Public
VU email	64	26%	28%	31%	15%	107	Public
Commercial cloud storage (e.g., iCloud, Dropbox, Google Drive)	58	26%	26%	32%	16%	107	Public
Local folder on VU computer/laptop	53	15%	19%	44%	22%	110	Public
Private email	17	37%	25%	22%	15%	107	Public
An external database (e.g., with a journal)	11	11%	16%	28%	46%	103	Public
Non-profit cloud storage (e.g., SURFdrive)	11	12%	15%	33%	40%	104	Secure
Data Archiving and Networked Services (DANS)	9	2%	8%	30%	60%	102	Secure

Looking at the perceived safety of data storage facilities¹⁸, the VU network drives are regarded as safest places to store data, soon followed by the hard drive of a (portable) computer or smartphone. In addition to these data storage practices and the perceived safety, another aspect seems relevant: the frequency of use of a particular service is partly related to how aware researchers are of its safety. The Dutch services that are ranked lowest (Surfdrive and DANS) in terms of usage ($\pm 10\%$) score high on unfamiliarity on its safety (between 40-60%). That is remarkable since these services aim to be safe alternatives to their commercial counterparts (Google Drive, Dropbox). These commercial services are deemed (very) safe by 32%. Portable data storage means are deemed most insecure, yet this ranks second in terms of usage. One can conclude that respondents consciously or unconsciously take a security risk when using unencrypted USB drives and the like for research data.

¹⁸ In June 2016 the VU made new storage facilities available, and their implementation may lead to different future behavior in data storage.

7.5 Data sharing

Making data publicly available is increasingly being promoted by universities, research councils, the Open Science Foundation, and so forth. The arguments for data sharing are diverse; it can appeal to the argument that society is owner of research data and should have access to it; that data is too valuable to be locked away; that colleagues need to be able to verify the quality of data; that data sharing promotes the innovation and progress in a discipline, and so forth.

Given this plethora of motivations for data sharing, we wondered how researchers themselves view data sharing: do they take value in it, and if so, what do they value? From the arguments for data sharing that were presented to the researchers, it is clear that ‘being accountable’ to both colleagues and the public is valued a lot, alongside ‘stimulating the integrity of the discipline’. ‘Renewal of the discipline’ and ‘meeting the demands of journals’ is also valued by more than 70% of the researchers. When it comes to reasons that are more related to the outside world, then this is valued less; ‘informing the public at large’ and ‘meeting the demands of funders or administrators’.

Table 18. Ranking of motivations on question: “How important do you believe it is to make your data available to third parties, when you take the following objectives into account?”

Importance of reasons for making data available	Reasonably important	Very important	Total Responses	Mean
Providing colleagues the opportunity to check my work	28,2%	57,3%	110	4,41
Stimulating the integrity of my discipline	36,9%	45,9%	111	4,32
Ensuring public accountability	36,4%	41,8%	110	4,17
Renewal and innovation of my discipline	32,1%	39,4%	109	4,11
Meeting the demands of journals	43,6%	28,2%	110	3,95
Protecting my data against loss	26,6%	40,4%	109	3,91
Providing data for educational purposes	34,5%	29,1%	110	3,85
Publishing open access	31,8%	28,2%	110	3,75
Meeting the demands of funding organizations	32,7%	16,4%	110	3,42
Informing the public at large	20,0%	31,8%	110	3,58
Meeting the demands of administrators/directors in science	21,3%	10,2%	108	2,95
<i>Mean based on a 5 point scale, ranging from 1 ‘not important’ to 5 ‘very important’.</i>				

7.6 Summary

A number of topics on research integrity were addressed in the survey, with answers by respondents involved in research. First on authorship dilemmas. Active involvement in producing an article is viewed as a necessity to become an author; supervisors and head of departments should not be granted authorship on status alone. In addition, also the narrative responses indicate that ‘ghost authorship’ is an issue to consider, relating to favoritism and promotion or tenure of staff. Second on the question how to handle data. Respondents are unaware of the security levels of the data storage means they use; the most secure data storage facilities are used least. This constitutes security risks for the organization. Data sharing is for now primarily valued when it serves the purposes of the research and his/her discipline. Meeting demands of funders, journals and serving educational or societal purposes is less prominent.

8. Fostering integrity and preventing violations

After exploring the values that provide foundations for respondents work, their views of the organizational culture and practice, the violations they encounter and their views on authorship and data storage and sharing, we will now turn to the tools and instruments that can foster integrity. The literature on ‘what helps’ on organizational integrity is divers¹⁹, but the overall lessons suggest that the following is important:

- integrity should be on the agenda, at all levels (incl. top and bottom);
- the tone at the top is important, the role of leadership;
- to pay attention to the ‘bright side’ of ethics and integrity (values, culture, awareness) as well as to the ‘dark side’ to prevent misbehavior (compliance), resulting;
- to have an adequate ‘integrity organization/system’ in place with relevant policies and instruments (incl. personnel policy, clarification of norms in codes, institutions for advice, reporting and investigation);
- reflection on the effectiveness of strategies and instruments.

In this section the topics in the survey on existing policies and instruments will be addressed. Respondents were asked whether they were familiar with existing policies, instruments and institutions and what their views are on their effectiveness (including the integrity policy in their work entity, the faculty and the university, the existing VSNU code of conduct, and faculty and national institutions as the faculty's ethical review board, confidential counselor and data management policy, as well as the National Board for Research Integrity).

8.1 Familiarity with integrity policies and tools

Effective integrity policies and instruments presuppose that they are known by employees. The general image amongst the respondents is that the selected instruments and policies are rather unfamiliar (see table 19). A little over 50% is at least somewhat familiar with integrity policy at work unit level, and that is the most optimistic account of familiarity. Looking at the ranking of unfamiliarity, then we see a distinct ordering: the last three items (including the check item on data policy) are very distant to the gamma employees. The four most familiar items concern policies that primarily set a framework for research. In between the two are the new instruments for safeguarding integrity, the confidential counsellors and the Ethical Review Board. Their familiarity is rather low (between 30-40% knows the counsellors; between 34-46% knows the ERB). Looking at the role of providing advice to researchers and employees on issues of (research) integrity, and hence preventing or resolving issues at an early stage as possible, the great unfamiliarity of the recently installed ERB's and the counsellors thus seems a point of concern.

¹⁹ The question on ‘what helps’ of course also relates to the existing ideas and knowledge on what causes/leads to integrity violations. See for the diverse causes for example Owsam, 2004; Poff, 2004; Fanelli, 2010; Martinson et al., 2010; DuBois et al., 2013; Bouter, 2014; Fanelli, Costas & Larivière, 2015; Tjink et al., 2016; and for reflection on the instruments that help to protect integrity: Kelley, Agle & DeMott, 2005; Heres & Lasthuizen, 2012; Huberts, 2014; Drenth, 2015; Tauginienė, 2016, with on codes of conduct: Rezaee, Elmore & Szendi, 2001; Van der Linden, 2010; ESF, 2011.

Table 19. Familiarity with tools and policies for integrity. Question: “How familiar are you with the following persons/parties/instruments?”

	Completely unfamiliar	Somewhat familiar	Quite familiar	Very familiar	Don't know this very well
Policy in my work entity with regard to integrity	21,6%	20,7%	22,5%	7,2%	27,9%
Faculty policy with regard to integrity	20,8%	29,0%	15,8%	4,5%	29,9%
The VSNU code of conduct	25,2%	20,3%	18,9%	5,9%	29,7%
University Policy with regard to integrity	26,0%	26,0%	14,8%	3,1%	30,0%
The faculty's ethical review board	27,6%	18,6%	13,1%	6,3%	34,4%
The confidential counselor on academic Integrity	35,9%	16,1%	12,6%	4,0%	31,4%
The LOWI (National Board of Research Integrity)	40,4%	16,1%	10,3%	3,1%	30,0%
The faculty's data management policy	47,5%	17,9%	6,3%	0%	28,3%
The medical ethical review board of VUmc	61,4%	6,4%	3,6%	,9%	27,7%
<i>N for the items varies between 220-223.</i>					

8.2 Perceived importance of instruments and policies

Next to the question of how familiar respondents are with policies and instruments that deal with integrity, we asked them what they believed to be important to them (table 20). Almost all of the selected practices and instruments are seen as (very) important when it comes to stimulating integrity. Peer review of publications scores first, but also the next six tools (independent body for reporting, ethical review of research, attention in annual evaluation and work meetings, making data public and confidential counsellor) are believed to be (very) important by 70-75% of the respondents. An ethical faculty code is perceived as important by 62%.

In addition, though ‘leadership’ was not explicitly addressed among the ‘tools’, from various reports in open responses we learn that ‘leading by example’ is seen of utmost importance by employees.

When we compare these results with the previous answers in the familiarity of instruments and institutions, this justifies the conclusion that many -also new- initiatives are appreciated though not very well-know (including the ethical review of research and the confidential counsellors).

Some differences between faculties are worthwhile to mention here. The need for an ERB is, for example, appreciated a bit more at the faculty of Law (80% believes this is (very) important), against 77% at FEWEB and 64% at FSS).

Table 20. Perceived importance of tools and policies for integrity: Question: “How important are the following instruments to you when it comes to stimulating integrity?”

	Very Unimportant	Unimportant	Unimportant nor important	Important	Very Important
The assessment of academic publications (peer review)	2,7%	2,3%	12,2%	52,3%	30,6%
Possibility to report integrity violations to an independent body	2,3%	3,2%	19,4%	48,2%	27,0%
Adequate ethical review of research	1,8%	9,5%	15,8%	53,4%	19,5%
Attention for integrity in the evaluation of employees	3,2%	2,3%	22,3%	57,3%	15,0%
Attention for integrity in meetings of the work entity	3,1%	4,0%	22,0%	58,7%	12,1%
Making research data public	2,3%	7,2%	19,8%	44,1%	26,6%
The presence of a confidential counsellor	1,8%	6,3%	21,3%	46,6%	24,0%
An (ethical) code of conduct at faculty level	5,5%	7,3%	25,0%	51,4%	10,9%
A code of conduct at work entity level	6,3%	10,9%	38,5%	33,9%	10,4%
<i>N varies between 220-223.</i>					

When we take a look at differences between staff, some items show interesting differences (table 21).

Table 21. Perceived importance of selected tools and policies, specified for function

	Presence confidential counselor	Ethical review of research	Research data public	Attention for integrity in meeting work entity
PhD (n=16-17)	93,8%	81,3%	70,6%	64,7%
Ass. Prof (n=24)	62,5%	70,8%	70,8%	58,3%
Assoc. Prof (n=16-17)	70,6%	64,7%	62,5%	70,6%
Prof. (n=30)	66,7%	73,3%	90,0%	83,3%
Sup. Staff Dep. (n=5)	100%	80%	80%	80%
Sup. Staff Fac. (n=21-22)	81,0%	95,2%	85,7%	68,2%
Not Say (n=29)	62,1%	58,6%	51,7%	72,4%
<i>Percentage of the respondents that perceive the tools and policies (very) important.</i>				

Firstly, we notice that PhD candidates and support staff value a confidential counsellor more than tenured academic staff. The difference between PhDs and their promotors is particularly striking; the presence of a confidential counsel for PhD's specifically (as is the case with FSS) seems to fulfill a need. Secondly, support staff at faculty level is the greatest champion of the ethical review of research; presuming that these respondents included research support staff, this indicates that support staff also has a keen eye on integrity in research. Thirdly, making research data public is supported much more by professors and faculty support staff, in general the staff that relates the organizational dimension of research to the outside world. Finally, professors (in general also those who manage departments) take most value in discussing integrity affairs in meetings.

8.3 Integrity and ethics in education

As we noted earlier, integrity is also faced with challenges in educational settings. Next to cheating on exams and plagiarism, inappropriate behavior and the manipulation of lecturers was encountered by about half of the participants that responded (table 13). Reflecting on the topic what can foster integrity in education thus seems relevant.

We asked respondents whether a number of topics receive enough attention in education. Table 22 summarizes the results for the three faculties. We first of all see that in general the student's reflection on his own behavior is in need of more attention, followed by attention for ethics and integrity in their future profession. Noteworthy is that the faculty of Law stands out with 56% of the respondents feeling the need for more reflection on their own behavior, and 60% thinks that the future professional role should be addressed more. A second observation is that respondents from FSS share the conviction that research skills receive ample attention, vis a vis the other two faculties who appreciate more attention (Law in particular).

Table 22. *Perceived importance of integrity topics in student education*

Do the following topics receive sufficient attention in student education?		Very insufficient (%)	Insufficient (%)	Neither sufficient /insufficient t (%)	Sufficient (%)	More than sufficient (%)
Reflection on the integrity of the student's own behavior	Law (n=25)	4,0	52,0	20,0	20,0	4,0
	FSS (n=51)	3,9	37,3	23,5	29,4	5,9
	FEWEB (n=60)	0,0	36,7	28,3	28,3	6,7
Integrity and ethics in future (societal) responsibility of the student	Law (n=25)	20,0	40,0	16,0	16,0	8,0
	FSS (n=51)	2,0	35,3	23,5	35,3	3,9
	FEWEB (n=60)	3,3	33,3	31,7	21,7	10,0
Ethical foundations of theories and perspectives taught	Law (n=25)	4,0	32,0	28,0	24,0	12,0
	FSS (n=50)	8,0	28,0	26,0	36,0	2,0
	FEWEB (n=60)	8,3	16,7	33,3	33,3	8,3
Ethics and integrity of research (skills)	Law (n=25)	0,0	40,0	20,0	32,0	8,0
	FSS (n=50)	4,0	8,0	30,0	52,0	6,0
	FEWEB (n=59)	6,8	22,0	25,4	33,9	11,9

8.5 Summary

The survey results offer limited but nevertheless challenging results on what is important for fostering academic integrity. When we also take into account previous results on organizational culture and integrity violations, in summary a number of observations seem relevant.

Integrity is seen as an important topic for many agendas, in research practices but also for the work unit and in the evaluation of employees (HRM). More than 70% of the respondents consider that as effective. The presented other elements of the 'integrity organization or system' are seen as important as well, including rules and norms and institutions that offer advice (confidential officers, also for PhD's) and are available to report and investigate violations. In addition, the familiarity with the present system is limited (incl. Ethical review board and confidential counsellors), which suggests that communication in this might be intensified.

In general, respondents value a stimulating, open and dialogical approach to integrity more than rules and procedures and codes that prescribe what norms should be. Also 'leading by example' seems to be important. In education, deficits in themes pertaining to integrity and ethics were signaled, and might be addressed. Reflection on student's own behavior and the future professional role are seen as important.

9. Summary

Integrity and ethics are nowadays on many societal agendas, also in academia. Not just because of the debates over integrity violations in academic and public media, but also because efforts have been made to develop new policies, practices and paradigms for ensuring academic and scientific integrity. This development led to involvement of the Faculty of Social Sciences (FSS) of the Vrije Universiteit on the topic with a project on integrity which included a survey on the views, ideas, values and experiences concerning integrity among its employees. Two other faculties were willing to participate in the integrity survey (Faculties of Law, and of Economics and Business Administration; FEWEB).

In April 2016 a survey was distributed amongst all employees of the three gamma faculties. Invitations to participate were sent to 1722 employees, including staff with guest accounts, flexible contracts and student assistants. 367 employees started, 305 filled in at least one question (17.7%). The response on the different questions varied.

Distribution over of the respondents over the three faculties showed no major deviation from the actual population in terms of faculty of residence. All job categories were represented (except the remarkable absence of postdocs as identified respondents). Nevertheless, the overall somewhat disappointing response rate should be taken into account in interpreting the results.

The purpose of the survey was to contribute to our knowledge and understanding of how employees view specific aspects pertaining to integrity in academia, and what their experiences with integrity violations and policies are. The survey thus focused on ‘academic integrity’ rather than only on ‘scientific or research integrity’. It included questions about the values that are important for employees, the organizational culture in relation to integrity, experiences with integrity violations, data management and publication practices and what fosters integrity and prevents violations.

This report describes and summarizes the main results on the perceptions of university employees who participated in the survey concerning those topics.

There appears to be much similarity in what those academic employees see as *important values* in their work, as well as in the barriers they experience in realizing a number of values. The results bring food for thought, are not easy to interpret, but the self-image of the ‘virtuous professional’ seems to summarize what is basic: employees want to act with expertise and integrity, and want to be open and accountable about what they do. Organizational processes, administrative demands and conflicting policies are reported as the most experienced barriers to realizing what employees find important in their work. Openness in the organization is valued highly, but also encounters communicative and organizational barriers.

The perceptions of respondents of aspects of ‘*organizational culture*’, related to integrity, offers food for thought, with a differentiated picture in terms of the employees ideas and experiences. In the work units an open discussion is possible on the ethical dilemmas and unethical behavior of colleagues, though directly addressing each other’s behavior seems more difficult. The involvement of their own management is appreciated and deemed important for fostering integrity in the workspace, with some hesitation on whether leadership is critical enough among themselves.

Many employees miss clarity on the values and norms by the organization. Reporting integrity violations, is seen as risky by a minority, not to be ignored though. Confidential counsellors that might assist and help employees confronted with dilemma's, also on reporting, are not clearly recognized.

The data on the *integrity violations* encountered by employees (and how they deal with that) concerned respondents with experiences in multifold commitments and tasks (incl. research and support), but also in education and on students behavior. We asked how often respondents had 'encountered' a violation, and for the interpretation it is relevant to take into account that multiple respondents can refer to the same incident that occurred.

The overall image can be summarized with the metaphor 'the glass is half full and half empty', with elements that are a cause for optimism (half full) as well as or more critical and sometimes pessimist interpretations (half empty). There is on the one hand no reason for exaggeration of the integrity problems and violations present at the gamma faculties. For example a majority of the respondents encountered no integrity violation during the last two years and most employees are willing to report violations when they encounter them. On the other hand the data offers a lot of information for the conclusion that integrity dilemma's and violations are present and should be taken seriously. This concerns a variety of problems, with more than 30% of the respondents having encountered 'Misusing the ideas of others', 'Favoritism', 'Dubious handling of data', 'Abuse of power', 'Discrimination and/or intimidation' and 'Waste of resources' (possibly partly referring to the same incidences). The percentages are even higher for experiences with integrity violations by students (in particular plagiarism and cheating during exams, but also manipulation of teachers and intimidation).

The comparison with data from a similar survey in the public sector, showed many similarities on the signaled occurrence of types of integrity violations. This warrants consideration on how special a university is on what employees experience, as well as with the potential to learn from policy experiences in other sectors.

Satisfaction over how actual reports of violations were handled differs. Reasons for not reporting future violations should be a point of concern.

A number of specific topics on research integrity were addressed in the survey. First on *authorship dilemmas*. Active involvement in producing an article is viewed as a necessity to become an author; supervisors and head of departments should not be granted authorship on status alone. In addition, also the narrative responses indicate that 'ghost authorship' is an issue to consider, relating to favoritism and promotion or tenure of staff. Second on the question *how to handle data*, respondents are unaware of the security levels of the data storage means they use; the most secure data storage facilities are used least. This constitutes security risks for the organization. Data sharing is for now primarily valued when it serves the purposes of the research and his/her discipline. Meeting demands of funders, journals and serving educational or societal purposes is less prominent.

What is seen by employees as important for *fostering academic integrity*? Integrity is seen as an important topic for many agendas, in research practices but also for the work unit and in the evaluation of employees (HRM). More than 70% of the responding participants consider that as

effective. Other elements of the ‘integrity organization or system’ are seen as important as well, including clear rules and norms and institutions that offer advice (confidential officers, also for PhD’s) and are available to report and investigate violations. The familiarity with the existing instruments and policies is rather limited though (incl. ethical review board and confidential counsellors).

In general, respondents value a stimulating, open and dialogical approach to integrity more than rules and procedures that prescribe. Also ‘leading by example’ seems to be important. In education, more reflection on student’s own behavior and their future professional role are seen as important.

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Appendix 1: Distribution respondents over faculties, job categories, gender and employment history

Table 1. Response per faculty

	Number	% of respondents	% in gamma cluster
Law	68	22,3%	21,4%
FSS	104	34,1%	29,6%
FEWEB	133	43,6%	49,0%
Total	305	100,0%	100%

Table 2. Response per job category

Position	N	% respondents
Student-ass.	2	1,6%
PhD	17	13,8%
Postdoc	1	0,8%
Lecturer	1	0,8%
Assistant professor	24	19,5%
Associate professor	18	14,6%
Professor	30	24,4%
Support staff	27	22,0%
Other	3	2,4%
Total	123	100%
I would rather not say	29	
Not reported	153	
Total Sample	305	

Table 3. Response and gender

Gender	Female	Male	I would rather not say	Not Reported	Total
Law	27	13	5	23	68
FSS	28	26	11	39	104
FEWEB	24	47	11	51	133
Total	79	86	27	113	305

Table 4. Response and employment history

How long are you employed at the VU?	Law	FSS	FEWEB
Less than 1 year	2	2	6
1-5 years	18	17	21
6-10 years	13	11	10
11-15 years	6	12	10
16 or more	3	13	20
I would rather not say	2	10	14
Not Reported	24	39	52
Total Sample	68	104	133

Appendix 2:

Additional tables with more specific information on organizational culture

Table 1. Organizational culture

Work entity level	Means					
	Total (n=235- 250)	LAW (n=52- 55)	FSS (n=81- 87)	FEWEB (n=101- 108)	Scientific (n=88-91)	Support (n=26- 27)
Within my work entity personal opinions can be expressed freely	4,88	4,85	4,72	5,02	5,03	5,04
If a colleague acts unethically, he/she will appreciate it if I discuss it with him/her	4,25	4,16	4,04	4,47	4,44	4,37
Within my work entity integrity dilemmas can be discussed openly	4,41	4,69	4,14	4,49	4,60	4,37
Within my work entity colleagues address each other's unethical behavior	3,71	3,83	3,43	3,88	3,88	3,85
Managerial level						
My manager communicates the importance of ethics and integrity well	4,36	4,48	4,24	4,39	4,43	4,81
My manager communicates the values and principles we have to respect	4,15	4,24	3,97	4,26	4,32	4,48
My manager takes reports of undesirable employee conduct seriously	4,62	4,76	4,44	4,68	4,72	5,00
My manager makes fair and balanced decisions	4,53	4,54	4,41	4,62	4,61	4,78
If my manager observes a colleague behaving unethically, he/she will call this colleague to account	4,49	4,50	4,29	4,65	4,65	4,65
Managers are sufficiently critical of one another's behavior	3,60	3,67	3,25	3,85	3,72	3,74
Organizational level						
The organization makes it sufficiently clear how we should behave	3,59	3,47	3,47	3,74	3,83	3,56
In our organization people are expected to work as efficiently as possible	4,08	3,55	4,12	4,33	4,03	4,15
In this organization it is expected that you will always do what is right for the organization and the public	4,24	4,07	4,19	4,36	4,29	4,52
People are expected to comply with the law and professional standards over and above other considerations	4,37	4,17	4,40	4,45	4,45	4,48
In this organization, people are mostly out for themselves	3,80	3,54	4,16	3,63	3,74	2,85
In our organization employees are willing to violate the law to achieve their performance targets	2,80	2,52	3,12	2,68	2,61	2,93

Within our organization, ethical conduct is rewarded	3,11	3,28	2,88	3,20	3,27	3,30
In this organization, people are expected to follow their own personal and moral beliefs	4,14	4,02	4,09	4,24	4,22	4,26
<i>Scale of 6 answer categories clustered in (strongly) disagree, (strongly) agree and a middle range.</i>						

Table 2. Grades for integrity of organizational units per faculty

Grade for integrity (from 1-10)	LAW (n=45-47)	FSS (n=69-70)	FEWEB (n=88-91)
My direct colleagues	8,19	7,84	8,22
My own work unit/ department	8,06	7,29	7,81
The management of my unit/department	7,52	7,04	7,47
The board of my faculty	7,15	6,36	7,07
The board of the VU	6,33	6,13	6,93

Appendix 3: Additional tables with more specific information on integrity violations

Table 1. Ranking of encountered integrity violations per faculty

	Law (N= 35-44)	Mean	FSS (N=53-61)	Mean	FEWEB (N=75-82)	Mean
1	Waste of resources or breach of contract	1,77	Favoritism: favoring friends, family, colleagues or students	2,44	Favoritism: favoring friends, family, colleagues or students	1,86
2	Using the ideas of others without permission or proper references	1,65	Dubious or selective presenting or analysing of data	2,18	Using the ideas of others without permission or proper references	1,67
3	Fraud in education	1,54	Abuse of power towards colleagues (including authorship)	2,13	Dubious or selective presenting or analysing of data	1,66
4	Inappropriate behavior, discrimination and/or intimidation of colleagues, students or others	1,52	Using the ideas of others without permission or proper references	2,10	Waste of resources or breach of contract	1,59
5	Favoritism: favoring friends, family, colleagues or students	1,51	Inappropriate behavior, discrimination and/or intimidation of colleagues, students or others	2,02	Abuse of power towards colleagues (including authorship)	1,58
6	Unjust influence of third parties (including the commissioning partner)	1,37	Waste of resources or breach of contract	1,93	Inappropriate behavior, discrimination and/or intimidation of colleagues, students or others	1,52
7	Fraud or theft of the organization	1,28	Fraud in education	1,58	Fraud or theft of the organization	1,50
8	Abuse of power towards colleagues (including authorship)	1,27	Not being open about conflicting ancillary positions or roles elsewhere	1,58	Fraud in education	1,39
9	Dubious or selective presenting or analysing of data	1,27	Unjust influence of third parties (including the commissioning partner)	1,52	Not being open about conflicting ancillary positions or roles elsewhere	1,25
10	Misconduct outside work	1,26	Conflict between job appointment at the VU and an ancillary position	1,43	Unjust influence of third parties (including the commissioning partner)	1,25

11	Not being open about conflicting ancillary positions or roles elsewhere	1,22	Falsifying or manipulating research data	1,31	Conflict between job appointment at the VU and an ancillary position	1,24
12	Conflict between job appointment at the VU and an ancillary position	1,19	Fraud or theft of the organization	1,30	Falsifying or manipulating research data	1,14
13	Abuse of (access to) confidential information	1,10	Abuse of (access to) confidential information	1,26	Abuse of authority in engaging with research participants	1,12
14	Falsifying or manipulating research data	1,07	Abuse of authority in engaging with research participants	1,16	Abuse of (access to) confidential information	1,07
15	Corruption or bring by third parties	1,05	Corruption or bring by third parties	1,07	Misconduct outside work	1,06
16	Abuse of authority in engaging with research participants	1,00	Misconduct outside work	1,02	Corruption or bring by third parties	1,05
<i>Answer options ranging from 1 'never' to 5 'often'</i>						